UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,400	09/16/2003	Peter Phelps	9-13528-197US	9677

20988 7590 05/21/2007

OGILVY RENAULT LLP
1981 MCGILL COLLEGE AVENUE
SUITE 1600
MONTREAL, QC H3A2Y3
CANADA

EXAMINER	
HALIYUR, VENKATESH N	
ART UNIT	**PAPER NUMBER**
2616	

MAIL DATE	DELIVERY MODE
05/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/662,400	PHELPS ET AL.	
	Examiner	Art Unit	
	Venkatesh Haliyur	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 09/16/2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a valid date is not provided for references listed for items AR, AT in section "Other References" of Form PTO-1449. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

2. Claims 1-20 are pending in the application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for

patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Humblet et al [US Pat: 6,992,978].

Regarding claim 1, Humblet et al in the invention of "Method and System for Path Protection in Communications Network" disclosed a method for providing unprotected traffic **(preemptable traffic)** transported on protection channels **(protection paths)** in an optical network that provides transport for protected traffic **(non preemtable traffic)** using the protection channels for failover protection and transport for unprotected traffic using idle protection channels **(col 3, lines 18-22)**, the method comprising: defining an ordered set **(ordered list)** of request priority values for requesting use of the protection channels **(col 3, lines 23-28)**, and priority values for at least two grades of service **(range of priority values assigned for traffic over working paths)** for the unprotected traffic **(col 5, lines 42-47)**; and creating a protection channel access policy **(activation list and path activation commands, col 3, lines 23-33)** for regulating **(controlling or scheduling)** use of the protection channels occupied by unprotected traffic of the at least two grades of service **(preemptable and non-preemptable priority assigned for each working path, col 2, lines 64-67),** in response to protection switch requests of corresponding request priority values **(Fig 3, priority assigned working paths-WP1,WP2,WP3 and corresponding protection paths-PP1,PP2, col 6, lines 3-18)**.

Regarding claim 2, Humblet et al disclosed defining the ordered set **(ordered list)** of request priorities comprises prioritizing different types of network management **(centralized network management system for configuring paths, col 6, lines 34-39)** initiated requests for access to protection channels and automated responses to changes in status of a working channel **(path status updates, Fig 15, col 17, lines 22-34).**

Regarding claim 3, Humblet et al disclosed that prioritizing different types of automated responses to changes in a status of a working channel **(path status, col 18, lines 26-33)** comprises defining request priority values **(priority assignments)** for each grade of service of protection traffic on the working channels, under different network conditions **(utilization and failure conditions, col 16, lines 3-30, Fig 14).**

Regarding claim 4, Humblet et al disclosed creating the protection channel access policy **(path activation list)** comprises assigning each of the at least two grades of service **(preemptable and non-preemptable traffic)** for the unprotected traffic, a priority value that is higher than at least one of the request priority values **(col 17, lines 35-62).**

Regarding claims 5-6, Humblet et al disclosed assigning a priority value to a first of the at least two grades of service **(preemptable and non-preemptable traffic)** of the unprotected traffic, that is higher than a request priority value related to a signal degrade condition of the working channel **(col 5, lines 31-34)** and assigning a priority value to a second of the at least two grades of service of the unprotected traffic, that is

higher than a request priority value related to a signal fail condition of the working channel **(col 5, lines 35-39)**.

Regarding claim 7, Humblet et al disclosed assigning a highest priority value to a network management initiated forced **(preemtable traffic priority)** switch request priority value, and lowest priority values to a test request priority value **(col 5, lines 56-67)** and a manual **(pre-calculated)** switch request priority value (col 6, lines 1-40).

Regarding claim 8, Humblet et al disclosed a method for handling a protection switch request at a protection switch processor **(switching node 100, Fig 6A, col 6, lines 49-59, col 8, lines 5-13)**, the method comprising: receiving the protection switch request **(failure notification message)** for use of a protection channel on a link in an optical network **(col 16, lines 31-42)**, the protection switch request indicating a request priority **(col 15, lines 48-67)**; determining a current occupancy of the protection channel **(protection path activation list)**, the occupancy being one of idle, occupied by unprotected traffic associated with one of a plurality of grades of service **(preemptable and non-preemptable traffic)**, and protected traffic switched from a protected working channel with a specific request priority **(col 16, lines 1-25);** applying a protection access policy by determining whether the request priority of the switch request is higher than a priority of the occupant **(col 16, lines 26-30)**, in order to provide conditional access to the data transport capacity based on a relative value of the request priority and the priority of the occupant **(col 16, lines, 31-42)**.

Regarding claim 9,17 Humblet et al disclosed applying the protection access policy further comprises: refusing the switch request if the request priority is less than,

or equal to, that of the occupant **(col 16, lines 25-30)**; and admitting the switch request if the protection channel is idle, or the occupant is extra traffic of a lower priority than the request priority **(col 16, lines 31-34)**.

Regarding claim 10, Humblet et al disclosed refusing the priority switch request comprises pending the request so that if the occupant releases the protection channel, a network element **(node)** that issued the priority switch request is notified **(col 16, lines 34-42).**

Regarding claim 11, Humblet et al disclosed a method for handling a protection switch request received at a network element via a link of an optical network used to transport protected traffic with failover protection to protection channels, and to transport extra traffic on unoccupied protection channels of the network **(col 15, lines 48-67)**, the method comprising: determining a protection channel and a priority value associated with the protection switch request **(col 16, lines 1-19)**; determining a priority value associated with data transport capacity reserved by the protection channel by examining an occupancy of the data transport capacity **(col 16, lines 20-25)**, the occupancy being one of idle **(protection path activation list)**, occupied by unprotected traffic with a predetermined grade of service **(preemptable and non-preemptable traffic)**, and occupied by protected traffic working channel **(col 16, lines 26-30)**; and applying a protection switched from a protected access policy based on a comparison of the priority value associated with the switch request and the priority value associated with the protection channel **(col 16, lines 31-38)**.

Regarding claim 12, Humblet et al disclosed applying the protection access policy comprises: refusing the priority switch request if the priority value of the switch request is less than or equal to that of the priority value associated with the occupant of the data transport capacity **(col 16, lines 25-30)**; and admitting the switch request if the priority value of the switch request is greater than that of the priority value associated with the occupant of the data transport capacity **(col 16, lines 31-34).**

Regarding claim 13, Humblet et al disclosed performing switch operations to support the protection channel if the protection switch request is admitted **(col 16, lines 45-54)**.

Regarding claims 14-15,18, Humblet et al disclosed refusing the priority switch request further comprises: forwarding a protection switch request pended message **(switch commands)** along the protection channel; and if the data transport capacity becomes unoccupied **(col 17, lines 46-63)**, forwarding a message along the protection channel indicating that the data transport capacity is idle **(col 17, lines 12-34)** and admitting the switch request further comprises forwarding a pre-empted switch request message to a next network element of an occupant protection channel currently using the data transport capacity, to request the occupant relinquish **(free up)** the data transport capacity **(col 17, lines 35-45)**.

Regarding claim 16, Humblet et al disclosed a protection switch processor for applying a protection access policy in an optical network that supports protected traffic and extra traffic at predefined grades of service **(preemptable and non-preemptable traffic)** using pre-provisioned **(configured)** working and protection channels **(Figs 1-3)**,

comprising: means for determining a priority value associated with a protection switch request message for requesting access to a protection channel **(col 5, lines 31-56)**; means for determining an occupancy **(utilization or bandwidth)** of the protection channel **(col 5, lines 57-62)**; means for determining a priority value associated with the protection channel by determining a priority value associated with an occupant of the protection channel if the protection channel is occupied **(col 5, lines 57-68, col 6, lines 1-2)**; and means for comparing the priority value associated with the protection switch request message to the priority value associated with the protection channel to determine which of the priority values is highest **(col 6, lines 3-18)**.

Regarding claims 19-20, Humblet et al disclosed that the protection switch processor is instantiated on each network element **(node A1, Figs 7-8)** in the optical network **(SONET, col 11, lines 39-62)** and that the protection switch processor is instantiated on a network management workstation connected to the optical network **(col 6, lines 34-39).**

Conclusion

7. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached @ (571)-272-7493. Any inquiry of a general

nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner

05/15/07

WING CHAN
SUPERVISORY PATENT EXAMINER

5/16/07